



Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

September 10, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Oak Ridge Recycling and Disposal Facility / 017-16940-00035

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

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Mr. Jim Davis
Oak Ridge Recycling and Disposal Facility
R.R. #3 365B County Road 150 East
Logansport, IN 46947

September 10, 2003

Re: **017-16940**
First Significant Permit Modification to
Part 70 No.: T 017-7945-00035

Dear Mr. Davis:

Oak Ridge Recycling and Disposal Facility was issued a permit on April 20, 1999 for a stationary municipal solid waste landfill. A letter requesting changes to this permit was received on February 10, 2003. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of constructing a landfill gas recovery plant, equipped with four (4) reciprocating internal combustion engines. The source is also constructing insignificant activities. The designation of this source is being changed from a major PSD source to a minor PSD source, as well as from a major source of HAPs to a minor source of HAPs. Language was added to Condition D.1.6 to allow for the use of Method 25A for stack testing.

The changes in the Part 70 Operating Permit are documented in the Technical Support Document. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Craig J. Friederich, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 ext. 19 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
CJF/MES

cc: File - Cass County
U.S. EPA, Region V
Cass County Health Department
Air Compliance Section Inspector - Dave Rice
Compliance Branch - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michelle Boner



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PART 70 OPERATING PERMIT

OFFICE OF AIR QUALITY

**Oak Ridge Recycling & Disposal Facility
R.R. #3 365B County Road 150 East
Logansport, IN 46947**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 017-7945-00035	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: April 20, 1999 Expiration Date: April 20, 2004

First Reopening: R 017-13162-00035, October 5, 2001
First Significant Source Modification 017-16796-00035, pending

First Significant Permit Modification No.: 017-16940-00035	Pages Affected: 5,6a,30,32,33,45,48,48a
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: September 10, 2003

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Oak Ridge Recycling & Disposal Facility
Logansport, Indiana
Permit Reviewer: W.E.McPhail

First Significant Permit Modification
017-16940-00035
Modified by: CJF:MES

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T 017-7945-00035

Certification
Emergency/Deviation Occurrence Report
Semi-Annual Compliance Monitoring Report

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary municipal solid waste landfill (MSLWLF)

Responsible Official: Mark Johnson
Source Address: R.R. #3 365B County Road 150 East, Logansport, IN 46947
Mailing Address: R.R. #3 365B County Road 150 East, Logansport, IN 46947
SIC Code: 4953
County Location: Cass
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source under PSD Rules
Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units:

- (a) One (1) solid waste disposal facility having the meaning described in 40CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1988 and has a design capacity of 10,984,358 Megagrams.
- (b) One (1) flare with a capacity of 1800 cubic feet per minute, constructed in 1996.
- (c) One (1) landfill gas recovery plant, used to produce electric power, equipped with four (4) reciprocating internal combustion engines, identified as EG1 through EG4, exhausting to stacks ES1 through ES4, each rated at 8.90 million British thermal units per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Space heaters, process heaters, or boilers using the following fuels:
 - (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (b) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (2) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.

- (3) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (4) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (5) The following VOC and HAP storage containers:
 - (a) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids
- (6) Cleaners and solvents characterized as follows:
 - (a) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100EF) or;
 - (b) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (7) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (8) Paved and unpaved roads and parking lots with public access.
- (9) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (10) On-site fire and emergency response training approved by the department.
- (11) Emergency generators as follows:
 - (a) Gasoline generators not exceeding 110 horsepower.
- (12) Farm Operations
- (13) Other activities or categories not previously identified:
 - (a) Leachate Storage Tank #1;
 - (b) Leachate Storage Tank #2;
 - (c) Crankcase Breather Vent;
 - (d) Solidification process;
 - (e) Leachate Recirculation; and
 - (f) Passive flare.

- (14) The following VOC and HAP storage containers:

Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including:

- (a) One (1) engine oil storage tank, capacity: 1,000 gallons of engine oil.
- (b) One (1) waste oil storage tank, capacity: 1,000 gallons of waste oil.
- (c) One (1) anti-freeze storage tank, capacity: 550 gallons of anti-freeze.

- (15) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including:

One (1) cold cleaner parts washer, capacity: 0.3 gallons of Safety Kleen solvent per day.

- (16) Other activities or categories not previously identified with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_x, three (3) pounds per hour or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead:

- (a) One (1) crankcase breather vent for engine oil, with potential PM emissions estimated to be 19.72 pounds per day.
- (b) One (1) gas chromatograph vent, with negligible emissions of all criteria pollutants.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) solid waste disposal facility having the meaning described in 40CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1988 and has a design capacity of 10,984,358 Megagrams.
- (b) One (1) flare with a capacity of 1800 scfm, constructed in 1996.
- (c) One (1) landfill gas recovery plant, used to produce electric power, equipped with four (4) reciprocating internal combustion engines, identified as EG1 through EG4, exhausting to stacks ES1 through ES4, each rated at 8.90 million British thermal units per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] and to HAPs [326 IAC 14-1-1][40 CFR Part 61, Subpart A]

- (a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart WWW.
- (b) The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated as 326 IAC 14-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 61, Subpart M.

D.1.2 Non-applicability Determination

The municipal solid waste landfill is not subject to the provisions of the following 40 CFR Part 60 Subparts: Cc, D, Da, Db, Dc, E, Ea, Eb, K, Ka, Kb, O, GG, and OOO.

D.1.3 Municipal Solid Waste Landfill NSPS [326 IAC 12] [40CFR 60.752, Subpart WWW]

The municipal solid waste landfill has a design capacity greater than 2.5 million megagrams (Mg) and shall either comply with 40CFR 60.752 (b)(2) or calculate the non methane organic compound (NMOC) emission rate for the landfill using the procedures specified in 40 CFR 60.754.

D.1.4 Operational Standards for Collection and Control Systems [40CFR 60.753]

In order to comply with 40 CFR 60.752 (b)(2)(ii) the Permittee shall:

- (1) Operate the collection system such that gas is collected from each area, cell, or group of cells in the municipal solid waste landfill in which solid waste has been in place for five years if active or 2 years or more if closed or at final grade.
- (2) Operate the collection system with negative pressure at each wellhead except under the following conditions:
 - (a) Fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40CFR 60.757(f)(1).

- (2) At least once every 24-hour period, asbestos-containing waste material that has been deposited during the previous 24-hour period must:
 - (a) be covered with at least 15 centimeters (6 inches) of compacted nonasbestos containing material, or
 - (b) be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. Any used, spent, or other waste oil is not considered a dust suppression agent.
- (3) Use an alternate emissions control method that has received prior written approval by the Administrator.
- (4) Also, unless a natural barrier deters access by the general public, warning signs and fencing must be installed or the requirements of paragraph (2)(a) above must be met.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [40CFR 60.754(b)]

- (a) After installation of a collection and control system in compliance with 40CFR 60.755, the Permittee shall calculate the non methane organic compound (NMOC) emission rate for purposes of determining when the system can be removed using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

- (1) The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of 40CFR 60.
 - (2) The average NMOC concentration, C_{NMOC} , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of 40CFR 60. If using Method 18 of Appendix A of 40CFR 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The Permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40CFR 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.
 - (3) The Permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Office of Air Quality (OAQ).
- (b) Pursuant to 40 CFR 60.754(d):

For the performance testing required in 40CFR 60.752(b)(2)(iii)(B), Method 25C or Method 18 of appendix A of 40CFR 60 shall be used to determine compliance with 98% reduction weight percent efficiency of NMOC from the control device or the 20 ppmv hexane on a dry basis at 3% oxygen outlet concentration level, or if the control device is an open flare, 40 CFR 60.18 procedures can be used, unless another method to demonstrate compliance has been approved by the Office of Air Quality (OAQ) as provided by 40CFR 60.752(b)(2)(i)(B). In cases where the outlet concentration is less than fifty (50) ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25). If using Method 18 of appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

NMOC_{in} = mass of NMOC entering the control device

NMOC_{out} = mass of NMOC exiting control device

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Monitoring [40CFR 60.756]

Except as provided in 40CFR 60.752(b)(2)(i)(B),

- (1) The Permittee seeking to comply with 40CFR 60.752(b)(2)(ii)(A) for an active gas collection shall install a sampling port and a thermometer, other temperature measuring device or an access port for temperature measurements at each wellhead and:
 - (a) Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40CFR 60.755(a)(3);
 - (b) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40CFR 60.755(a)(5); and
 - (c) Monitor temperature of the landfill gas on a monthly basis as provided in 40CFR 60.755(a)(5).
- (2) The Permittee seeking to comply with 40CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment except as otherwise provided for in 40 CFR 60, Subpart WWW or approved variances contained within the Collection and Control System Design Plan required pursuant to this rule:
 - (a) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius of ± 0.5 EC, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.
 - (b) A device that records flow to or bypass of the control device. The Permittee shall either; install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every fifteen (15) minutes; or secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

- (f) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
- (1) Scheduled starting and completion dates.
 - (2) Reason for disturbing the waste.
 - (3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.
 - (4) Location of any temporary storage site and the final disposal site.

D.1.12 Record Keeping Requirements [326 IAC 12] [40CFR 60.758]

- (1) Except as provided in 40 CFR 60.752(b)(2)(i)(B) the Permittee subject to 40 CFR 60.752(b) shall keep for at least five years up-to-date, readily accessible, continuous on-site records of the design capacity report which triggered 40CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within four (4) hours. Either paper copy or electronic formats are acceptable.
- (2) Except as provided in 40 CFR 60.752(b)(2)(i)(B) or approved variances contained within the Collection and Control System Design Plan required pursuant to this rule, the Permittee of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment listed in (a) through (d) below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five (5) years. Records of control device vendor specifications shall be maintained until removal.
 - (a) Where the Permittee subject to the provisions of 40CFR 60.758 seeks to demonstrate compliance with 40CFR 60.752(b)(2)(ii):

The maximum expected gas generation flow rate as calculated in 40CFR 60.755(a)(1). The Permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Office of Air Quality (OAQ).

The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40CFR 60.759(a)(1).
 - (b) Where the Permittee subject to the provisions of 40CFR 60.758 seeks to demonstrate compliance with 40CFR 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:

The average combustion temperature measured at least every fifteen (15) minutes and averaged over the same time period of the performance test.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (7) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (15) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including:
 - One (1) cold cleaner parts washer, capacity: 0.3 gallons of Safety Kleen solvent per day.
- (16) Other activities or categories not previously identified with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_x, three (3) pounds per hour or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead:
 - (a) One (1) crankcase breather vent for engine oil, with potential PM emissions estimated to be 19.72 pounds per day.
 - (b) One (1) gas chromatograph vent, with negligible emissions of all criteria pollutants.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the brazing, cutting, soldering, welding, and crankcase breather vent shall not exceed the pounds per hour as calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2][326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the one (1) cold cleaner parts washer without a remote solvent reservoir shall:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.

- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the one (1) cold cleaner parts washer, shall:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
- (c) The owner or operator of the one (1) cold cleaner parts washer shall also comply with 326 IAC 8-3-2. Compliance with 326 IAC 8-3-5 shall also ensure compliance with 326 IAC 8-3-2.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for Part 70 Significant Source and Significant Permit Modifications

Source Background and Description

Source Name:	Oak Ridge Recycling and Disposal Facility
Source Location:	R.R. #3 365B County Road 150 East, Logansport, IN 46947
County:	Cass
SIC Code:	4953
Operation Permit No.:	T 017-7945-00035
Operation Permit Issuance Date:	April 20, 1999
Significant Source Modification No.:	017-16796-00035
Significant Permit Modification No.:	017-16940-00035
Permit Reviewer:	Craig J. Friederich

The Office of Air Quality (OAQ) has reviewed a modification application from Oak Ridge Recycling and Disposal Facility relating to the construction and operation of the following emission units and pollution control devices:

One (1) landfill gas recovery plant, used to produce electric power, equipped with four (4) reciprocating internal combustion engines, identified as EG1 through EG4, exhausting to stacks ES1 through ES4, each rated at 8.90 million British thermal units per hour.

The following Insignificant Activities will also be added:

- (a) The following VOC and HAP storage containers:

Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including:

- (1) One (1) engine oil storage tank, capacity: 1,000 gallons of engine oil.
- (2) One (1) waste oil storage tank, capacity: 1,000 gallons of waste oil.
- (3) One (1) anti-freeze storage tank, capacity: 550 gallons of anti-freeze.

- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including:

One (1) cold cleaner parts washer, capacity: 0.3 gallons of Safety Kleen solvent per day.

- (c) Other activities or categories not previously identified with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_x, three (3) pounds per hour or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead:

- (1) One (1) crankcase breather vent for engine oil, with potential PM emissions estimated to be 19.72 pounds per day.
- (2) One (1) gas chromatograph vent, with negligible emissions of all criteria pollutants.

History

On February 10, 2003, Oak Ridge Recycling and Disposal Facility submitted an application to the OAQ requesting to add a landfill gas recovery plant, used to produce electric power, to their existing source. This landfill gas recovery plant will act as a control device by burning the landfill gas to produce electricity. Oak Ridge Recycling and Disposal Facility was issued a Part 70 permit on April 20, 1999. The source was designated as a major PSD source in their issued Title V. The default NSPS values for the VOC/NMOC concentration of the gas were used to run the U.S. EPA's landfill gas model. This grossly overestimated the potential to emit VOC from the source. A site specific analysis was taken in April 2001, and the source ran the landfill gas model with these numbers. This shows that the potential to emit VOC from the source will not exceed 108 tons per year. Therefore, the designation of this source is being changed from a major PSD source to a minor PSD source and this Significant Source Modification will not require PSD review.

The HAPs calculations from the original Title V also grossly overestimated the potential to emit using the default NSPS values. The source has submitted calculations, using AP-42 factors for the concentration and molecular weight of the HAPs contained in the landfill gas. These factors, along with the maximum gas generation flow rate obtained from running the U.S. EPA's landfill gas model using the site-specific gas analysis data, and taking into account that there is a seventy-five percent (75%) efficient control device at the source (flare), allows for the re-designation of this source from a major to minor source of Hazardous Air Pollutants (HAPs).

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
ES1	Engine EG1	22.83	0.83	5,843	800
ES2	Engine EG2	22.83	0.83	5,843	800
ES3	Engine EG3	22.83	0.83	5,843	800
ES4	Engine EG4	22.83	0.83	5,843	800

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 10, 2003.

Emission Calculations

See pages 1 through 2 of 2 TSD Appendix A of this document for detailed emissions calculations. HAP calculations for the engines were provided by the source, were reviewed and determined to be accurate and correct. AP-42 emission factors were used to calculate the HAP emissions from the engines while burning landfill gas. The potential to emit combined HAPs from the engines while burning landfill gas is 0.372 tons per year. The potential to emit PM and PM₁₀ from the insignificant crankcase breather vent was estimated to be 19.72 pounds per day, equivalent to 3.60 tons per year. The potential to emit VOC from the new insignificant tanks was estimated to be 1.00 tons per year.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	11.7
PM ₁₀	11.7
SO ₂	5.07
VOC	2.04
CO	133
NO _x	88.9

HAPs	Potential To Emit (tons/year)
Total HAPs	0.37
TOTAL	0.37

Justification for Modification

The Part 70 Operating Permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4) and 326 IAC 2-7-10.5(f)(7), because the modification has the potential to emit NO_x of greater than twenty-five (25) tons per year, and the potential to emit CO of greater than one-hundred (100) tons per year. The proposed operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification (SPM 017-16940-00035) in accordance with 326 IAC 2-7-12(d)(1). The Significant Permit Modification will give the source approval to operate the proposed emission units.

County Attainment Status

The source is located in Cass County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Cass County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Cass County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited). Emission estimates are based on projected emission rates for the year 2017 using the EPA Landfill Gas Emissions Model and site-specific landfill gas analysis data. Potential emissions from the flare have also been included.

Pollutant	Emissions (tons/year)
PM	0.68
PM ₁₀	0.68
SO ₂	15.0
VOC	108
CO	97.5
NO _x	35.2

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of two-hundred fifty (250) tons per year or more, and it is not one of the twenty-eight (28) listed source categories.
- (b) The VOC emissions are based upon the calculations provided by the source which indicate that, using a site-specific gas analysis, the potential to emit VOC is one-

hundred eight (108) tons per year. The CO emissions are from the Technical Support Document (TSD) for the Part 70 Operating Permit (T 017-7945-00035).

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Proposed Modification	11.7	11.7	5.07	2.04	133	88.9	0.37
PSD Threshold Level	250	250	250	250	250	250	-

Federal Rule Applicability

- (a) This significant permit modification does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 for all criteria pollutants.
- (1) with the potential to emit before controls equal to or greater than the major source threshold for PM, PM₁₀, SO₂, VOC, and NO_x.
- (2) that is subject to an emission limitation or standard for CO; and
- (3) uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this modification.

- (b) The three (3) insignificant storage tanks are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60. 110b, Subpart Kb, because even though these tanks were constructed after the rule applicability date of July 23, 1984, their storage capacities are less than forty (40) cubic meters, or 10,566 gallons.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this proposed modification.
- (d) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source is not considered a major source of hazardous air pollutant (HAP) emissions because the source does not have the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source has been re-classified as a minor source pursuant to 326 IAC 2-2. Therefore, this is a minor modification to an existing minor PSD source. Since the potential to emit for the entire source after the modification will remain less than two-hundred fifty (250) tons per year for all pollutants, and it is not one of the twenty-eight (28) listed source categories, this source will remain a minor source, after this modification, pursuant to 326 IAC 2-2.

State Rule Applicability - Insignificant Activities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the crankcase breather vent shall not exceed the allowable emission rate of particulate per hour as determined by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The one (1) cold cleaner parts washer, is a cold cleaner degreaser without a remote solvent reservoir. Therefore, the requirements of 326 IAC 8-3-2, Organic Solvent Degreasing Operations: Cold Cleaner Operation, and 326 IAC 8-3-5, Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control, are applicable. Compliance with 326 IAC 8-3-5 will satisfy the requirements of 326 IAC 8-3-2.

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreasers shall ensure that the following requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover

while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaning degreasers shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 10-4 (NO_x Budget Trading Program)

These units are not subject to 326 IAC 10-4-1 because they are not an "Electricity Generating Unit" or "EGU" as defined in 326 IAC 10-4-2(16) and each is not a "large affected unit" as defined in 326 IAC 10-4-2(27). Each unit is not an EGU because it will not serve a generator that has a nameplate capacity greater than twenty-five (25) megawatts and produces electricity for sale under a firm contract to the electric grid. Each unit is not a large affected unit because it will not have a maximum design heat input greater than two hundred fifty million (250,000,000) British thermal units per hour.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the

source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no new applicable Compliance Monitoring Requirements to the proposed facilities at this source.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary municipal solid waste landfill (MSLWLF)

Responsible Official:	Mark Johnson
Source Address:	R.R. #3 365B County Road 150 East, Logansport, IN 46947
Mailing Address:	R.R. #3 365B County Road 150 East, Logansport, IN 46947
SIC Code:	4953
County Location:	Cass
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program
	Major Minor Source under PSD Rules
	Major Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units:

- (a) One (1) solid waste disposal facility having the meaning described in 40CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1988 and has a design capacity of 10,984,358 Megagrams.
- (2b) One (1) flare with a capacity of 1800 cubic feet per minute, constructed in 1996.
- (c) **One (1) landfill gas recovery plant, used to produce electric power, equipped with four (4) reciprocating internal combustion engines, identified as EG1 through EG4, exhausting to stacks ES1 through ES4, each rated at 8.90 million British thermal units per hour.**

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Space heaters, process heaters, or boilers using the following fuels:
 - (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (b) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (2) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (3) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (4) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (5) The following VOC and HAP storage containers:

Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids
- (6) Cleaners and solvents characterized as follows:
 - (a) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100EF) or;
 - (b) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (7) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (8) Paved and unpaved roads and parking lots with public access.
- (9) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (10) On-site fire and emergency response training approved by the department.
- (11) Emergency generators as follows:

Gasoline generators not exceeding 110 horsepower.
- (12) Farm Operations

(13) Other activities or categories not previously identified:

- (a) Leachate Storage Tank #1;
- (b) Leachate Storage Tank #2;
- (c) Crankcase Breather Vent;
- (d) Solidification process;
- (e) Leachate Recirculation; and
- (f) Passive flare.

(14) The following VOC and HAP storage containers:

Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including:

- (a) One (1) engine oil storage tank, capacity: 1,000 gallons of engine oil.
- (b) One (1) waste oil storage tank, capacity: 1,000 gallons of waste oil.
- (c) One (1) anti-freeze storage tank, capacity: 550 gallons of anti-freeze.

(15) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including:

One (1) cold cleaner parts washer, capacity: 0.3 gallons of Safety Kleen solvent per day.

(16) Other activities or categories not previously identified with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_x, three (3) pounds per hour or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead:

- (a) One (1) crankcase breather vent for engine oil, with potential PM emissions estimated to be 19.72 pounds per day.
- (b) One (1) gas chromatograph vent, with negligible emissions of all criteria pollutants.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) solid waste disposal facility having the meaning described in 40CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1988 and has a design capacity of 10,984,358 Megagrams.
- (b) One (1) flare with a capacity of 1800 scfm, constructed in 1996.
- (c) **One (1) landfill gas recovery plant, used to produce electric power, equipped with four (4) reciprocating internal combustion engines, identified as EG1 through EG4, exhausting to stacks ES1 through ES4, each rated at 8.90 million British thermal units per hour.**

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [40CFR 60.754(b)]

- (a) After installation of a collection and control system in compliance with 40CFR 60.755, the Permittee shall calculate the non methane organic compound (NMOC) emission rate for purposes of determining when the system can be removed using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

- (1) The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of 40CFR 60.
- (2) The average NMOC concentration, C_{NMOC} , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of 40CFR 60. If using Method 18 of Appendix A of 40CFR 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The Permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40CFR 60 by six to convert

from C_{NMOC} as carbon to C_{NMOC} as hexane.
- (3) The Permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Office of Air Quality (OAQ).

(b) Pursuant to 40 CFR 60.754(d):

For the performance testing required in 40CFR 60.752(b)(2)(iii)(B), Method 25C or Method 18 of appendix A of 40CFR 60 shall be used to determine compliance with 98% reduction weight percent efficiency of NMOC from the control device or the 20 ppmv hexane on a dry basis at 3% oxygen outlet concentration level, or if the control device is an open flare, 40 CFR 60.18 procedures can be used, unless another method to demonstrate compliance has been approved by the Office of Air Quality (OAQ) as provided by 40CFR 60.752(b)(2)(i)(B). **In cases where the outlet concentration is less than fifty (50) ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25).** If using Method 18 of appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

NMOC_{in} = mass of NMOC entering the control device

NMOC_{out} = mass of NMOC exiting control device

D.1.7 Monitoring [40CFR 60.756]

- (2) The Permittee seeking to comply with 40CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment, **except as otherwise provided for in 40 CFR 60, Subpart WWW or approved variances contained within the Collection and Control System Design Plan required pursuant to this rule:**

- (a) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius of ± 0.5 EC, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.

D.1.12 Record Keeping Requirements [326 IAC 12] [40CFR 60.758]

- (2) Except as provided in 40 CFR 60.752(b)(2)(i)(B) **or approved variances contained within the Collection and Control System Design Plan required pursuant to this rule**, the Permittee of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment listed in (a) through (d) below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five (5) years. Records of control device vendor specifications shall be maintained until removal.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (7) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (15) **Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including:**
 - One (1) cold cleaner parts washer, capacity: 0.3 gallons of Safety Kleen solvent per day.
- (16) **Other activities or categories not previously identified with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_x, three (3) pounds per hour or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead:**
 - (a) One (1) crankcase breather vent for engine oil, with potential PM emissions estimated to be 19.72 pounds per day.
 - (b) One (1) gas chromatograph vent, with negligible emissions of all criteria pollutants.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from ~~each of the above-listed facilities~~ **the brazing, cutting, soldering, welding, and crankcase breather vent** shall not exceed the pounds per hour as calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2][326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the one (1) cold cleaner parts washer without a remote solvent reservoir shall:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or

- (C) The solvent is heated.**
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.**
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).**
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.**
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):**
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.**
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.**
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.**
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the one (1) cold cleaner parts washer, shall:**
- (1) Close the cover whenever articles are not being handled in the degreaser.**
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.**
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.**
- (c) The owner or operator of the one (1) cold cleaner parts washer shall also comply with 326 IAC 8-3-2. Compliance with 326 IAC 8-3-5 shall also ensure compliance with 326 IAC 8-3-2.**

Compliance Determination Requirements

D.2.23 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Conclusion

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 017-16796-00035 and Significant Permit Modification 017-16940-00035.